Vol. 55, pp. 75-78

June 25, 1942

PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON INSTITUT

THREE NEW RODENTS FROM SOUTHERN UTAH. BY E. A. GOLDMAN.

Two hitherto unrecognized pocket gophers and a grasshopper mouse are here described. One of the pocket gophers is a representative of the *Thomomys townsendii* group which has not, as far as I am aware, been previously recorded from Utah. The other is a member of the widely-dispersed *Thomomys bottae* group, based on a series of specimens collected many years ago. The grasshopper mouse is a desert representative of the *Onychomys leucogaster* group. For the loan of specimens of described forms required for comparison I am indebted to Dr. E. Raymond Hall, of the Museum of Vertebrate Zoology, University of California.

Thomomys townsendii lenis, subsp. nov.

Type.—From Richfield, Sevier County, Utah. No. 264805, ♂ adult, skin and skull, U. S. National Museum (Biological Survey collection); collected by A. W. Moore, March 11, 1928. X-catalogue number 28835. Distribution.—Known only from the type locality in the upper part of

the Sevier River Valley, southern Utah.

General characters.—A cinnamon buffy subspecies, the smallest of the known members of the *Thomomys townsendii* group. Most closely resembling *Thomomys townsendii nevadensis* of central Nevada, but smaller; general coloration distinctly "cinnamon-buff" (Ridgway, 1912), instead of "pinkish buff"; cranial details, especially the more massive development of the supraoccipital behind the interparietal and consequent straightening of lambdoid crest, distinctive. Differs from both *Thomomys townsendii* elkoensis of the Humboldt River Valley, Nevada, and *Thomomys townsendii* similis of the upper Snake River Valley, Idaho, in decidedly smaller size and richer buffy coloration.

Color.—*Type* (partially molted): Upper parts near "cinnamon-buff," purest on sides of head, sides of neck, and upper base of tail, finely mixed with black on top of head and over back; sides of body, forearms, and

14-PROC. BIOL. Soc. Wash., Vol. 55, 1942. (75)

76 Proceedings of the Biological Society of Washington.

upper part of thighs "pinkish buff"; under parts overlaid with "pinkish buff," except on inguinal area where the hairs are pure white to roots; muzzle blac kish; fore feet and hind feet to well above ankles white; tail light buffy above, whitish below, becoming white all around near tip.

Skull.—Similar in general to that of *nevadensis*, but smaller and lighter in structure; upper surface of supraoccipital extends farther behind the interparietal, and rises more steeply from foramen magnum, without the deep median concavity usually present in *nevadensis* and the other subspecies of *townsendii*; nasals relatively longer and narrower and reach farther posteriorly beyond anterior plane of zygomata; incisors longer, more strongly decurved; molariform teeth smaller. Compared with *elkoensis, similis,* and other subspecies of *townsendii*, the skull is much smaller and differs otherwise in about the same characters as from *nevadensis*.

Measurements.—Type: Total length, 257 mm.; tail vertebrae, 89; hind foot, 32. Average of three adult male topotypes: 251 (248-255); 82 (74-86); 32 (31-32). Skull (type and an adult male topotype, respectively): Occipitol-nasal length, 43, 43.9; zygomatic breadth, 28, 28.7; width across squamosals (over mastoids), 22.5, 23.2; interorbital constriction, 6.7, 6.9; length of nasals, 15.4, 15.6; maxillary toothrow (alveoli), 7.8, 8.4.

Remarks.—As no other specimens of the Thomomys townsendii group appear to have been recorded from Utah, it seems possible that an isolated colony of a formerly more widely ranging species has remained in the Sevier River Valley. T. t. lenis is remarkable for its small size. It seems more convenient to treat the animal as a subspecies of townsendii, but wellmarked cranial features suggest that it may be worthy of full specific recognition.

Specimens examined.—Total number, 6 (1 skin without skull and 2 skulls without skins), all from the type locality.

Thomomys bottae levidensis, subsp. nov.

Type.—From Manti, Sanpete County, Utah (altitude about 5,500 feet). No. 191962, σ^3 adult, skin and skull, U. S. National Museum (Merriam collection); collected by Vernon Bailey, December 6, 1888. Original number 427.

Distribution.—Known only from the type locality in the San Pitch River Valley, south-central Utah.

General characters.—A rather small "cinnamon-buff" subspecies of the Thomomys bottae group. Closely allied to Thomomys bottae absonus of Houserock Valley, northern Arizona, but smaller; under parts more uniformly suffused with buff; skull shorter and slenderer in structure. Differs from Thomomys bottae albicaudatus of Provo, Utah, in smaller size and lighter general coloration; upper parts, especially along median line, less extensively mixed with black; skull smaller.

Color.—Type (winter pelage): Upper parts in general "cinnamon-buff"; purest along sides, the top of head and median dorsal area finely, but inconspicuously mixed with black; forearms, thighs, and under parts

"pinkish buff"; muzzle blackish; cheek pouches lined with white; feet whitish; tail light buffy, somewhat paler below.

Skull.-Similar to that of absonus, but smaller and of lighter proportions; distinctly shorter; nasals shorter; zygomata slenderer and relatively more widely spreading; auditory bullae smaller, less inflated; temporal ridges weakly developed as in absonus. Compared with that of albicaudatus, the skull is similar in general form, but decidedly smaller, with relatively wider spreading but slenderer zygomata.

Measurements.-Type. Total length, 227 mm.; tail vertebrae, 67; hind foot, 27. Two adult male topotypes, respectively; 209, 220; 65, 70; 27, 27. Average of eight adult female topotypes: 202 (194-222); 65 (60-73); 26 (24-27). Skull (type): Occipito-nasal length, 39.4; zygomatic breadth, 25.4; width across squamosals (over mastoids), 20; interorbital constriction, 6.5; length of nasals, 13.1; maxillary tooth row (alveoli), 7.6. Two adult female topotypes, respectively: Occipito-nasal length, 34.4, 34.7; zygomatic breadth, 21.6, 21.8; width across squamosals (over mastoids), 17.1, 17.3; interorbital constriction, 6.4, 6.5; length of nasals, 10.8, 10.9; maxillary tooth row (alveoli), 7.5, 7.4.

Remarks.—Thomomys bottae levidensis appears to be most closely allied to Thomomys bottae absonus, a geographic neighbor on the south. It has not been compared with Thomomys bottae tivius or Thomomys bottae convexus, but as both of these were described from localities west of the main ranges of mountains in south-central Utah, substantial differences in detailed characters are to be expected.

Specimens examined.-Total number, 13, all from the type locality.

Onychomys leucogaster aldousi, subsp. nov.

Type.—From Desert Range Experiment Station, 50 miles west of Milford, Millard County, Utah. No. 266502, J adult, skin and skull, U.S. National Museum (Biological Survey collection); collected by C. M. Aldous, April 18, 1941. X-catalogue number 30165.

Distribution .- Known only from the type locality, but may have an extensive range in the desert region of southwestern Utah and adjoining territory in Nevada.

General characters.—A small, pallid subspecies; ears conspicuously whitish at anterior base; tail white except a faintly dusky median line along upper side. Similar in size to Onychomys leucogaster brevicaudus of southern Idaho, but tail apparently shorter; contrasting strongly in paler coloration. Differing from Onychomys leucogaster melanophrys of the plateau region of southeastern Utah in decidedly smaller size, as well as paler coloration.

Color.—Type (winter pelage): Upper parts in general near "availaneous," varying to pale "vinaceous-buff" on face and along sides; entire under parts, forearms, cheeks, sides of neck, and feet white; ears dusky across middle, with conspicuous whitish patches on anterior base, and whitish tips; tail white, except a very narrow, faintly dusky median line along upper side.

78 Proceedings of the Biological Society of Washington.

Skull.—About as in brevicaudus.

Measurements.—Type: Total length, 134 mm.; tail vertebrae, 32; hind foot, 19. Skull.—Greatest length, 26.3; condylobasal length, 24.1; zygomatic breadth, 14.3; interorbital constriction, 5; width across squamosals (over auditory bullae), 11.6; length of nasals, 10.1; maxillary tooth row, 3.9.

Remarks.—This subspecies is based on a single specimen which presents characters apparently well beyond the range of individual variation in *brevicaudus*, the neighboring race on the north. It requires no close comparison with *melanophrys*, the much larger subspecies inhabiting the plateau region to the eastward. Specimens from Nephi and Kelton, Utah, are somewhat intermediate, but seem nearer to *brevicaudus*, to which they were referred by Hollister (Proc. U. S. Nat. Mus., vol. 47, p. 443, October 29, 1914). The new race is named for the collector, Clarence Moroni Aldous, in recognition of his meritorious field investigations of wildlife.